

ABSTRACT

THESIS: Neural Correlates of Attentional Control Theory in High Trait Anxious Individuals

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This study presented a comprehensive overview of Attentional Control Theory. Attentional Control Theory states that individuals high in trait anxiety are likely to experience an impairment in both shifting set and inhibition sub-components of the central executive. This impairment involves the processing efficiency of completing each of these tasks. The underlying neural frequency of alpha band activity was measured for individuals low and high in trait anxiety as they completed both shifting set and inhibition tasks. The results demonstrate that individuals high and low in trait anxiety demonstrated similar average response times for completion of both tasks. Despite this, the alpha band differences observed suggest that individuals high in trait anxiety may be experiencing a relaxed state at rest, but undergo a significant increase in alertness for the completion of an inhibition task. In addition, alpha activity differences showed that both high and low trait anxious individuals experience a similar level of cognitive activity during completion on the shifting set task. These results provide a foundation for understanding the underlying neural correlates of Attentional Control Theory, and provide several implications for the processing differences experienced by high and low trait anxious individuals.